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EXAMINER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

*See Attached.*

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
08/851,667

Applicant(s)  
Anderson et al.

Examiner  
Aung S. Moe

Group Art Unit  
2712



☒ Responsive to communication(s) filed on Aug 23, 1999

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-31 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-31 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 7

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed on Aug. 23, 1999 have been fully considered but they are not persuasive.

In page 13 of the remarks, the Applicant argues that "Matsumoto '524 fails to teach or suggest the scrolling from one mode-specific item to the next that are aligned to the orientation of a set of buttons."

In response, the Examiner disagrees because the broadest interpretation of present claimed invention does in fact obvious over the cited prior art. In this case, Matsumoto '524 does in fact show "scrolling from one mode-specific item (i.e., the elements 207-210 as shown in Fig. 4c of Matsumoto '524) to the next" by using the element 201 and a set of buttons (111), wherein these items are clearly aligned to the orientation of a set of buttons as shown in Figs. 4c, 5c, 6c and 8c of Matsumoto '524. Therefore, it is clear that the user can select the mode-specific item by scrolling the element 201 with the use of the set of buttons (111).

It is also noted that the camera of Matsumoto '524 can be placed into at least two of the multiple operation mode, for example, the picture taking mode, playback mode and edit mode as shown in Figs. 1-8c.

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Furthermore, the Applicant argues (in pages 13-15 of the remarks) that “the combination of the references is improper hindsight, and cannot be used to establish obviousness.”, and “there are no suggestions to combine the references.”

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Matsumoto '524 clearly stated at the pages 12-13 and 16-17 that the sole intention of the invention is to provide a portable camera equipped with convenient playback and

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editing functions, so that those editing operations that were formally carried out in a studio can be preformed on the site, and the user's work efficiency can be improved.

Moreover, the Mills '306 reference is merely used to show the obvious teaching of using a video editing software which provides the user with an interface for controlling and editing video information input from the video source. Therefore, having the system of Matsumoto '524 where most of the operation steps of the camera are control by the Microcomputer (113), and then given the well-established teaching of Mills '306 for using the software control video editing system, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Matsumoto '524 as taught by Mills '306 because Mills '306 suggested that such a modification would provide an efficient playback and editing operation as desired by Matsumoto '524 (see col. 3, lines 10-15, col. 5, lines 50-55) and such an advantage is clearly desirable in Matsumoto '524 (see Page 16 of Matsumoto '524).

In view of the above, to say one of ordinary skill in the art would not have been able to modify by applying the teaching of Mills '306 (i.e., a software program for controlling the video editing system) to a clearly analogous environment (i.e., the video editing system also utilized a software program in a microcomputer for controlling the editing operation as shown in Matsumoto '524) would be to deny that one of ordinary skill in the art had any common sense, thus, the present claimed invention is still considered obvious for at least the reasons discussed above and such claims are rejected as follow.

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In addition, the Examiner noted that the Applicant is arguing (pages 13-15 of the remarks) the applied references singly and not together for what would have suggested as a whole to one of ordinary skill in the art, further, one cannot show non-obviousness by analyzing references individually where, as here, the rejections are based on combinations of references.

However, Applicant's arguments with respect to the amended portions of the present claimed invention and the newly added claims have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(C) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

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3. Claims 1-10, 11-19, 21-23 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikuo Matsumoto et al. (Translation of JP 8-223,524) in view of Mills et al. (U.S. 5,513,306) and McIntyre et al. (U.S. 5,940,121).

Regarding claims 1-4, Matsumoto '524 discloses a method for integrating a user interface across multiple operating modes (i.e., Playback, editing, and picture-taking) of a digital camera (Fig. 1) having a display (110), wherein when the digital camera is placed into each one of the multiple operating modes, mode-specific items corresponding to that mode are displayed on the display (Figs. 4c and 6c), the digital camera including a first button with left and right navigation buttons having a horizontal orientation and a second button with up and down navigation buttons having a vertical orientation (Fig. 1, element 111) for interacting with the multiple operation modes (i.e., Normal/Multiple playback, Editing, and Picture-Taking modes), the method further comprising the step of:

mapping an aligned set of mode-specific items in the display to the orientation of the first button to create a mapped navigation button (see Figs. 4c, 6c and 8c);

scrolling from one mode-specific item to the next (i.e., selecting the different mode by using the button 111) in the aligned set by pressing the mapped navigation (111) wherein the display indicates which of the mode-specific item is a current active item (i.e., it is clear that when the button 111 is scrolling from one mode-specific item to the next then the character/mark composition means 108 indicates the changes in the display 110; see page 27-28).

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Furthermore, it is noted that Matsumoto '524 does not explicitly show the step of displaying additional information includes a list of information items corresponding to the current active item in the display in a location that is offset from the active item in a direction of orientation corresponding to that of the second button, and scrolling through the list of information items by pressing the second button as specified in claim 1-2.

However, the above mentioned claimed limitations are well-known in the art as evidenced by Mills '306. Moreover, Mills '306 teaches the use of video editing software which provides the user with an interface for controlling and editing video information input from the video source. Upon initialization of the editing system, the user is presented with a video window for displaying a set of mode-specific items (i.e., Fig. 2, the elements 24 and 34) having a horizontal orientation and displaying additional information includes a list of information items corresponding to the currently active item in the display in a location that is offset from the active item in a vertical orientation (i.e., col. 5, lines 30-39); and scrolling through from one mode-specific item to the next and the lists of information items with the control device 18 (see col. 3, lines 20-60, col. 4, line 45 to col. 5, line 68).

Therefore, having the portable digital camera with an editing operation as discloses by Matsumoto '524 and then given the well-established teaching of Mills '306, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display of Matsumoto '524 by providing the user interface as taught by Mills '306 in order to carry out an efficient playback and editing operation as suggest by Mills '306 (see col. 3, lines 10-15, col. 5,



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lines 50-55) and it is cleared that such advantages are clearly desirable in Matsumoto '524 (see Page 16 of Matsumoto '524).

Moreover, it is noted that although the combination of Matsumoto '524 and Mills '306 shows the use of the mapped navigation button (i.e., the elements 111 and 201 as shown in Matsumoto '524), the mode-specific items (Figs. 1-8c of Matsumoto '524 and col. 5, lines 20+ of Mills '306) and the scrolling means (the elements 48 and 46 as taught by Mills '306) for scrolling off either the image frames or the icons (see Figs. 2, 6 & 7 of Mills '306), Matsumoto '524 does not explicitly show "wherein a user holds down the mapped navigation button, *the mode-specific items are scrolled-off the display and replaced by new mode.*" as amended by the Applicant.

However, the above mentioned claimed limitations are well-known in the art as evidenced by McIntyre '121. Moreover, McIntyre '121 teaches the use of the navigation buttons (52, 54) in the camera so that the user may be held down the navigation buttons (52, 54) to scroll-off the mode-specific items from the display and replace by the new mode as amended by the Applicant (see Figs. 3a-3b, 4, & 8; col. 6, lines 50+; col. 7, lines 1+).

Therefore, having the combination of Matsumoto '524 and Mills '306, and then given the well-established teaching of McIntyre '121, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Matsumoto '524 as taught by McIntyre '121 in order to provide effective utilization of the display area as well as confirmation of a selection by scrolling the different operation modes, for example, selecting an

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album mode or selecting an annotation input mode can efficiently be realized as taught by McIntyre '121(see col. 8, lines 23+ of McIntyre '121).

Regarding claims 5-6, the combination of Matsumoto '524, Mills '306 and McIntyre '121 shows the step of displaying a set of menu icons as the mode-specific while in the first operation mode (see Fig. 6C of Matsumoto '524 and col. 5, lines 20-68, Fig. 2 of Mills '306); and the step of pressing the down navigation button (the button 111 of Matsumoto '524) to scroll through the list of information items (Fig. 2 of Mills '306) corresponding to the currently active item (see Fig. 6C of Matsumoto '524 and col. 5, lines 20-68, Fig. 2 of Mills '306).

Regarding claims 7-8, the combination of Matsumoto '524, Mills '306 and McIntyre '121 shows the step of providing a second operating mode where when the digital camera is placed into the second operating mode (i.e., Multi-playback/Normal-playback), a set of thumbnail images corresponding to captured images is displayed as the mode-specific items (Figs. 7C of Matsumoto '524; and Figs. 2 & 6, col. 5, lines 20-68 of Mills '306); and the step of displaying a large thumbnail as part of the additional information (Fig. 2 & 6 of Mills '306 and Fig. 7C & 8C of Matsumoto '524).

Regarding claims 9-10, Matsumoto '524 shows the step of providing a third operating mode (i.e., editing) wherein when the digital camera is placed into the third operating mode, a set of icons representing camera features is displayed as the mode-specific items (i.e., Figs. 6C & 8C, the elements 212, 213 and 214 of Matsumoto '524); and the step of changing a particular one of the camera features (i.e., a desired playback speed) by pressing one of the up and down navigation

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button to change a state of the corresponding icon (i.e., Figs. 6C & 8C, the elements 212 & 213; page 30 of Matsumoto '524).

Regarding claims 11, 12 and 13, please see Examiner's comment with respect to claims 1-4 as discussed above.

Regarding claim 14, please see Examiner's comment with respect to claim 5 as discussed above.

Regarding claim 15, the combination of Matsumoto '524, Mills '306 and McIntyre '121 shows wherein as the user presses the first set of navigation buttons (111 of Matsumoto '524) to scroll through the set of icons (Matsumoto '524 show a set of icons such as 211, 215, 216, 214 and 212), each of the icons is highlighted (i.e., As shown in Fig. 2, col. 5, lines 20-68, Mills '306 teaches the use of the menu bar which can be presented with certain functional icons and base on the user's selection these factional icons are highlighted), and becomes an active icon in response to the user pressing one of the second set of navigation buttons (111).

Regarding claims 18-19, the Matsumoto '524 shows wherein the digital camera is placed into a third operating mode (i.e., picture taking/editing) the menu-specific items (i.e., the elements 207-210, 212-216) representing camera feature settings. On the other hand, Mills '306 teaches that the additional information includes text representing the feature setting of the currently active item (i.e., As shown in Fig. 2, Col. 5, lines 20-68, Mills '306 teaches that when the user activated the certain functional icons from the menu bar then the additional information is activated along with text representation.). Therefore, it would have been obvious to one of ordinary skill in the

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art at the time the invention was made to modify the system of Matsumoto '524 by providing the teaching of Mills '306 in order to improve the ease of use during playback and editing operation as suggested by Mills '306 (see col. 5, lines 50-55).

Regarding claims 21-23, please see Examiner's comment with respect to claims 1-4 and 7-8 as discussed above.

Regarding claim 25, please see Examiner's comment with respect to claim 5 as discussed above.

Regarding claims 26-27, the combination of Matsumoto '524, Mills '306 and McIntyre '121 shows the steps of displaying a text feature list corresponding to the activated mode-specific item; and displaying text corresponding to a state of the activated mode-specific item (see Figs. 6C & 8C, the elements 212, 211, 214-216 of Matsumoto '524 and Fig. 2, col. 5, lines 20-68 of Mills '306 and col. 8, lines 23+ of McIntyre '121).

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto '524 and Mills '306 as applied to claims 1-10, 11-19, 21-23 and 25-27 above, and further in view of Isoguchi et al. (U.S. 5,146,353).

Regarding claim 20, the combination of Matsumoto '524, Mills '306 and McIntyre '121 does not explicitly show where the digital camera further includes a status display for displaying the mode-specific items and the additional information.

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The above mentioned claimed limitations are well-known in the art as evidenced by Isoguchi '353. Moreover, Isoguchi '353 teaches the use of a status display (Fig. 3) for displaying the mode specific items and the additional information (col. 4, line 8 - col. 5, lines 68) for the purpose of reducing the burden of a photographer and improving the maneuverability of the camera.

Therefore, having the combination of Matsumoto '524, Mills '306 and McIntyre '121 and then given the well-established teaching of Isoguchi '353, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Matsumoto '524 by providing the teaching of Isoguchi '353 for the purpose of reducing the burden of a photographer and improving the maneuverability of the camera as taught by Isoguchi '353 (col. 1, lines 40-45).

5. Claims 24 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto '524 and Mills '306 as applied to claims 1-10, 11-19, 21-23 and 25-27 above, and further in view of Matsumoto et al. (U.S. 5,796,428).

Regarding claims 24 and 30, the combination of Matsumoto '524, Mills '306 and McIntyre '121 shows the steps of displaying text (i.e., a name) of the image data captured by the camera (i.e., col. 8, lines 25+ of McIntyre '121) and including as part of the additional information, one or more media type such as a still image, and sound (i.e., col. 2, lines 50+ of McIntyre '121), but the combination of Matsumoto '524, Mills '306 and McIntyre '121 does not

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explicitly show the step of displaying a capture date and date corresponding to the activated mode-specific item such as the active image.

However, the above mentioned claimed limitations are well-known in the art as evidenced by Matsumoto '428. Moreover, Matsumoto '428 teaches the step of displaying a plurality of icons as the mode specific items (see Fig. 5) and displaying text of an image name, time and date corresponding to the activated mode-specific item such as the active image (sees Figs. 7-9, col. 1, lines 50-55, col. 7, lines 25-68, col. 9, line 55 - col. 10, line 68) so that the images can be easily rearranged and the pictures can also be automatically classified according to the themes.

Therefore, having the combination of Matsumoto '524 and Mills '306 and then given the well-established teaching of Matsumoto '428, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Matsumoto '524 by providing the teaching of Matsumoto '428 so that the images can be easily rearranged and the pictures can also be automatically classified according to the themes as taught by Matsumoto '428 (see col. 2, lines 40-60 and col. 3, lines 25-41 of Matsumoto '428).

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6. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto '524 in view of Mills '306 and Isoguchi '353.

Regarding claim 28, Matsumoto '524 discloses a digital camera having an integrated user interface; comprising: an image device for capturing image data (Fig. 2); a memory (105) coupled to the imaging device for storing the image data as captured images; a first set of navigation buttons having a first orientation and a second set of navigation buttons having a second orientation for controlling navigation in a display (Figs. 1 & 2, the elements 110 and 111); a processor (113) coupled to the image device, the memory, a primary display and to the first and second set of navigation buttons for controlling operation of the digital camera including a first operation mode and a second operating mode (Fig. 2, Pages 23);

a primary display (110) coupled to the processor (113), the primary display being divided into a first set of elements (i.e., Figs. 4C, 6C & 8C, the elements 207-210, 211-212, and 214-216) aligned with the orientation of the first set of the navigation buttons and when the camera is in the first operating mode (i.e., either one of Normal/Multiple playback, Editing, or Picture-Taking modes), a user navigates the first set of elements using the first set of navigation buttons (111).

It is further noted that Matsumoto '524 does not explicitly show a second element displayed offset from the first set of elements in a direction aligned with the orientation of the second set of navigation buttons, wherein a user navigates the second element using the second set of navigation buttons as cited in claim 28.

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However, the above mentioned claimed limitations are well-known in the art as evidenced by Mills '306. Moreover, Mills '306 teaches the use of video editing software which provides the user with an interface for controlling and editing video information input from the video source. Upon initialization of the editing system, the user is presented with a video window for displaying a first set of elements (i.e., Fig. 2, elements 24 and 34) having a horizontal orientation and displaying a second element corresponding to the currently active item in the display in a location that is offset from the active item in a vertical orientation (i.e., col. 5, lines 30-39); and scrolling through from one mode-specific item to the next and the lists of information items with the control device 18 (see col. 3, lines 20-60, col. 4, line 45 to col. 5, line 68).

Therefore, having the portable digital camera with an editing operation as discloses by Matsumoto '524 and then given the well-established teaching of Mills '306, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display of Matsumoto '524 by providing the user interface as taught by Mills '306 in order to carry out an efficient playback and editing operation as suggest by Mills '306 (see col. 3, lines 10-15, col. 5, lines 50-55) and it is cleared that such an advantage would have been desirable in Matsumoto '524.

Moreover, it is also noted that Matsumoto '524 does not explicitly show a status display coupled to the processor, the status display being divided into a third set of elements and a fourth set of elements, wherein the third set of the element is aligned with the orientation of the first set of navigation buttons and the fourth set of elements is displayed offset from the third set of



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elements in a direction of orientation corresponding to the second set of navigation buttons, wherein when the camera is in the second operating mode, the user navigates the third set of elements using the first set of navigation buttons and navigates the fourth set of elements using the second set of navigation buttons, whereby navigation of the second operating mode in the status display is similar to navigation of the first operating mode in the primary display.

However, the above mentioned claimed limitations are well-known in the art as evidenced by Isoguchi '353. Moreover, Isoguchi '353 teaches the use of a status display (Fig. 3) in the digital camera (1), wherein the status display coupled to the processor (L or 33 as shown in Figs. 4 and 5), and the status display being divided into a third set of elements (i.e., Interval, Macro) and a fourth set of elements (i.e., SINGLE, CONT, L→CONT., and H→SELF), wherein the third set of the element having a horizontal orientation (i.e., same orientation of the first set of navigation buttons 111 of Matsumoto '524) and the fourth set of elements is displayed offset from the third set of elements (see Fig. 3) in a vertical direction of orientation (i.e., it is corresponding of the second set of navigation buttons 111 of Matsumoto '524), wherein when the camera is in the second operating mode (i.e., picture-taking mode as disclosed by Matsumoto '524), the user navigates the third set of elements in the horizontal orientation and navigates the fourth set of elements in the vertical orientation, whereby navigation of the second operating mode in the status display (Fig. 3 of Isoguchi '353) is similar to navigation of the first operating mode in the primary display (i.e., the operation of the status display of Isoguchi '353 is similar to the operation of the primary display as discussed in the combination of Matsumoto '524 and Mills '306 as above).

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Therefore, having the combination of Matsumoto '524 and Mills '306 and then given the well-established teaching of Isoguchi '353, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Matsumoto '524 by providing the teaching of Isoguchi '353 for the purpose of reducing the burden of a photographer and improving the maneuverability of the camera as taught by Isoguchi '353 (col. 1, lines 40-45).

Regarding claim 29, it is further noted that Matsumoto '524 does not explicitly show a first and second status control buttons wherein the user navigates the status display using the first and second status control buttons.

However, the above mentioned claimed limitations are also well-known in the art as evidenced by Isoguchi '353. Moreover, Isoguchi '353 further teaches the use of a first and second status control buttons (see Fig. 3, col. 4, lines 8-68). Therefore, having the combination of Matsumoto '524 and Mills '306 and then given the well-established teaching of Isoguchi '353, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the conventional use of status control buttons of Isoguchi '353 to the portable digital camera of Matsumoto '524 in order to enable the user to avoid or at least minimize such inadvertent or erroneous operation during the picture-taking operation and further improving the maneuverability of the camera as suggested by Isoguchi '353 (see col. 1, lines 5-68).

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7. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fellegara et al. (U.S. 5,845,166) in view of Matsumoto et al. (U.S. 5,796,428).

Regarding claim 31, Fellegara '166 discloses a method for integrating a user interface across multiple operating modes (i.e., Captured mode, Edit mode, Slide show mode) of a digital camera (10), the digital camera (10) including a display (36, 202), and a navigational device (38) including first and second buttons (46, 48, 50, 52) for controlling the display (36,202), the first button having a first orientation and the second button having a second orientation (see Fig. 5), the method comprising the steps of:

providing the digital camera (10) with a first mode for capturing images (col. 13, lines 30+), providing the digital camera (10) with a second mode for displaying a set of menu categories on the display (see Figs. 8, 9, 11-12, 15) by displaying the set of menu categories (i.e., the elements 210, 212, 214, 216, 218 and 208) aligned to the orientation of the first button, scrolling from one menu category to the next in response to a user pressing the first button, wherein the display indicates which of the menu categories is a currently active menu category, wherein when a user holds down the first button, the menu categories are scrolled-off the display and replaced by new menu categories (see Figs. 11-12, 15 & col. 14, line 27-col. 15, line 20), and displaying additional information (206) corresponding to the currently active menu category in the display in a location that is offset from the menu categories in a direction of orientation corresponding to that of the second button (see Figs. 11-12 & 15); and

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providing the digital camera with a third mode for playback captured images on the display (i.e., Slide Show mode) by

displaying the images aligned to the orientation of the first button, scrolling from one image to the next in response to a user pressing the first button, wherein the display indicates which of the images is currently active image (i.e., Figs. 9-10) and displaying additional information (i.e., 206) corresponding to the currently active image in the display in a location that is offset from the image in a direction of orientation corresponding to that of the second button, wherein operation of the third mode is consistent with operation of the second mode to thereby increase ease of use of the digital camera (see Fig. 16 and col. 15, lines 10+).

Further, although it is clear that the images displayed in the display (202) are scrolled-off the display and replaced by the new images during the slide show mode by respectively using the first button (see Figs. 16 and col. 15, lines 10+), but it noted that Fellegara '166 does not explicitly show the use of a set of thumbnail images and wherein a user holds down the first button, the thumbnail images are scrolled-off the display and replaced by new thumbnail images as cited in claim 31.

However, the above mentioned claimed limitations are well-known in the art as evidenced by Matsumoto '428. Moreover, Matsumoto '428 teaches the use of a set of thumbnail images and such thumbnail images are scrolled-off the display by activating the scrolling means (604, 605) so that the user can be easily reviewed and further rearranged the captured images in a short period of time during the editing process (see col. 1, lines 55+, col. 10, lines 10+; Figs. 8-9 of

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Matsumoto '428); and Matsumoto '428 also teaches the steps of indicating with of the thumbnail images are a currently activated and displaying addition information corresponding to the currently active thumbnail image in the display in a location that is offset from the thumbnail images (see Figs. 24-25 and 27).

Therefore, having the system of Fellegara '166 and then given the well-established teaching of Matsumoto '428, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Matsumoto '524 by providing the teaching of Matsumoto '428 so that the images can be easily reviewed and rearranged; moreover, the images can also be automatically classified according to the themes as taught by Matsumoto '428 (see col. 2, lines 40-60 and col. 3, lines 25-41 of Matsumoto '428).

### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Klingler '316 shows the use of software control editing system comprising a means for displaying mode-specific items and means for scrolling-off the mode-specific item from the display by replacing with new mode-specific items; and furthermore, the system also comprises the steps of displaying additional information corresponding to the current active item or picture in the display in a location that is offset from the active item/picture.

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b. Egawa '460 shows the camera device comprising means for scrolling and wherein a user held down a first button then the images displayed in the display are scrolled-off the display and replaced by the new images.

c. McGarvey '186 shows the camera comprising an integrated user interface and comprising a first and second set of navigation buttons with different direction therein.

d. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

**Any response to this final action should be mailed to:**

**Box AF**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Art Unit: 2712

**Or Faxed to:**

(703) 308-9051, (for formal communications; please mark **"EXPEDITED  
PROCEDURE"**)

**Or**


(703) 308-5359 (for informal or draft communications, please label  
**"PROPOSED"** or **"DRAFT"**).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner  
should be directed to **Aung S. Moe** whose telephone number is (703) 306-3021. The examiner  
can normally be reached on Monday-Friday from 9:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,  
**Wendy Garber**, can be reach on (703) 305-4929.

Any inquiry of a general nature or relating to the status of this application should be  
directed to the Group receptionist whose telephone number is (703) 305-4700.

A. Moe   
October 27, 1999

  
TUAN HO  
PRIMARY EXAMINER